

1. An anti-seismic reinforcement and expansion method for expanding and remodeling an existing mid-rise building (1) into a high-rise building and the method comprising the steps of,

- 5 providing new seismic isolation foundations (5) for the high-rise building on the outer side of existing foundations of the mid-rise building (1),  
providing support members (6) on said newly provided seismic isolation foundations,  
forming new dwelling stories (10) above the existing building with utilizing said support members, and  
10 after said new dwelling stories are formed, remodeling each story of the above-ground part of the existing mid-rise building with reinforcing existing pile foundations (9).

2. An anti-seismic reinforcement and expansion method according to claim 1 for expanding and remodeling an existing mid-rise building (1) into a high-rise building  
15 wherein said step of reinforcing existing pile foundations is performed by digging around said existing pile foundations and filling concrete (18) around footings (9a) so as to increase the cross sectional area of the footings.

3. An anti-seismic reinforcement and expansion method for expanding and  
20 remodeling an existing mid-rise building (1) into a high-rise building and the method comprising the steps of,  
providing new seismic isolation foundations (5) for the high-rise building on the outer side of existing foundations of the mid-rise building (1),  
providing support members (6) on said newly provided seismic isolation foundations,  
25 forming new dwelling stories (10) above the existing building with utilizing said support members,  
after said new dwelling stories are formed, dismantling and removing the above-ground part of said existing mid-rise building to form a space,  
laying beams (16) between said support members in said space to form floors for a  
30 second story and stories above the second story ,  
providing a floor for a first story on the upper portion of existing pile foundations (9),  
and  
providing new dwelling spaces on said floors of said each new story .

4. An anti-seismic reinforcement and expansion method for expanding and remodeling an existing mid-rise building (1) into a high-rise building and the method comprising the steps of,

- 5 providing new seismic isolation foundations (5) for a high-rise building on the outer side of existing foundations of the mid-rise building (1),  
providing support members (6) on said newly provided seismic isolation foundations,  
forming new dwelling stories (10) above the existing building with utilizing said support members,  
10 after said new dwelling stories are formed, dismantling and removing the upper stories of said existing mid-rise building, and  
remodeling remaining stories of said existing mid-rise building story by story .

5. A building anti-seismically reinforced and expanded by the steps of,

- 15 providing seismic isolation foundations (5) for a high-rise building on the outer side of the foundations of an existing mid-rise building (1),  
providing support members (6) on said seismic isolation foundations, and  
forming new dwelling stories (10) above the existing building with utilizing said support members,  
20 wherein in said existing mid-rise building, each above-ground stories are remodeled sequentially and existing pile foundations (9) are reinforced.

6. A building anti-seismically reinforced and expanded by the steps of,

- 25 providing seismic isolation foundations (5) for a high-rise building on the outer side of the foundations of an existing mid-rise building (1),  
providing support members (6) on said seismic isolation foundations, and  
forming new dwelling stories (10) above the existing building with utilizing said support members,  
wherein floors for the second story and stories above the second story are formed by  
30 laying beams between said support members in a space created by dismantling and removing the above-ground part of said existing mid-rise building,  
wherein a floor for the first story is provided at the upper portion of said existing pile foundations (9), and

wherein new dwelling space is formed on the floors of each of the newly formed stories.

7. A building anti-seismically reinforced and expanded by the steps of ,  
providing seismic isolation foundations (5) for a high-rise building on the outer side of  
5 the foundations of an existing mid-rise building (1),  
providing support members (6) on said seismic isolation foundation, and  
forming new dwelling stories (10) above the existing building with utilizing said support  
members,  
wherein upper stories of said existing mid-rise building is dismantled and removed, and  
10 wherein each of remaining stories are remodeled.

15

20

25

30